

ECE-345-001 (Fall 2020)

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Review Test Submission: Quiz 5.1

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Course	Intro to Control Systems - Fall 2020 Section Group I67
Test	Quiz 5.1
Started	9/30/20 10:41 AM
Submitted	9/30/20 10:44 AM
Status	Completed
Attempt Score	4 out of 4 points
Time Elapsed	3 minutes
Results Displayed	Submitted Answers, Incorrectly Answered Questions

Question 1

1 out of 1 points

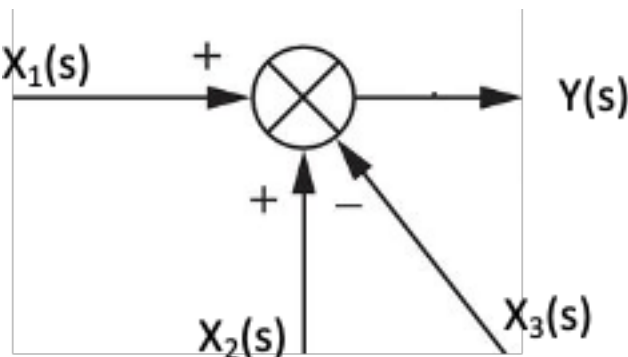
True or false? Block diagram reduction changes the input-output relationship of a complex system.

Selected Answer: False

Question 2

1 out of 1 points

Which of the following equations describes the summation junction pictured?

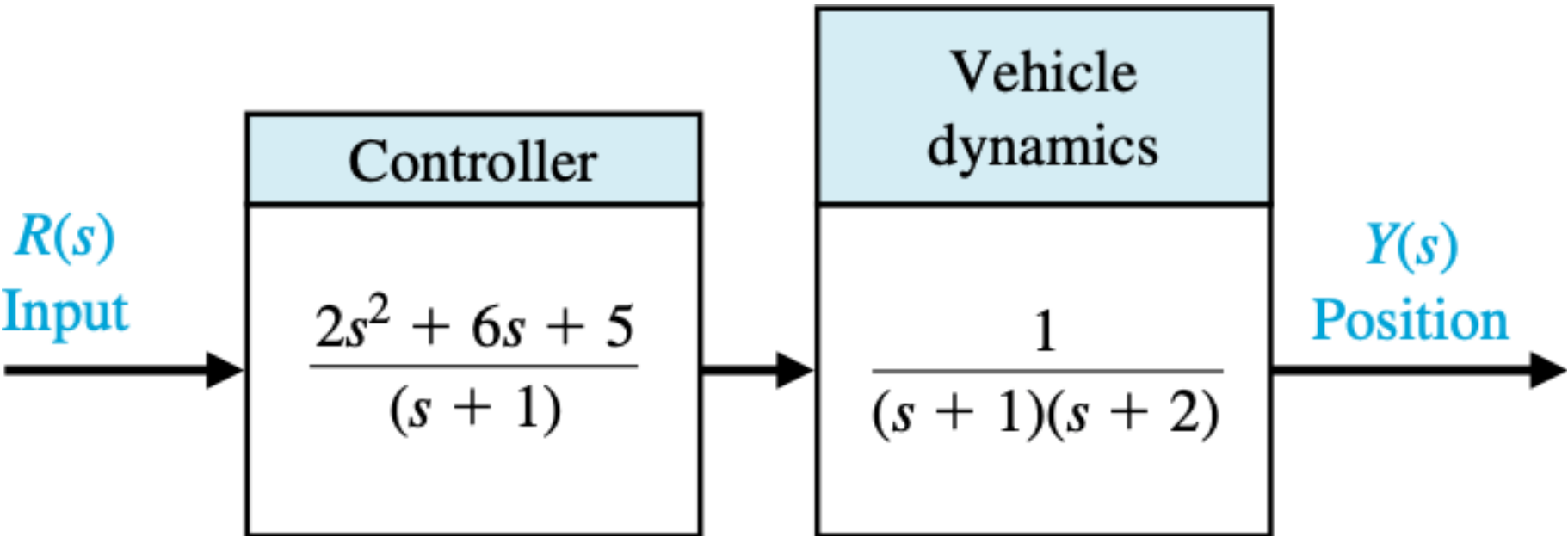


Selected Answer:
 $Y(s) = X_1(s) + X_2(s) - X_3(s)$

Question 3

1 out of 1 points

The following figure describes the longitudinal dynamics of an autonomous vehicle, along with a controller for lane-keeping. Which of the following equations describes the input-output relationship pictured?

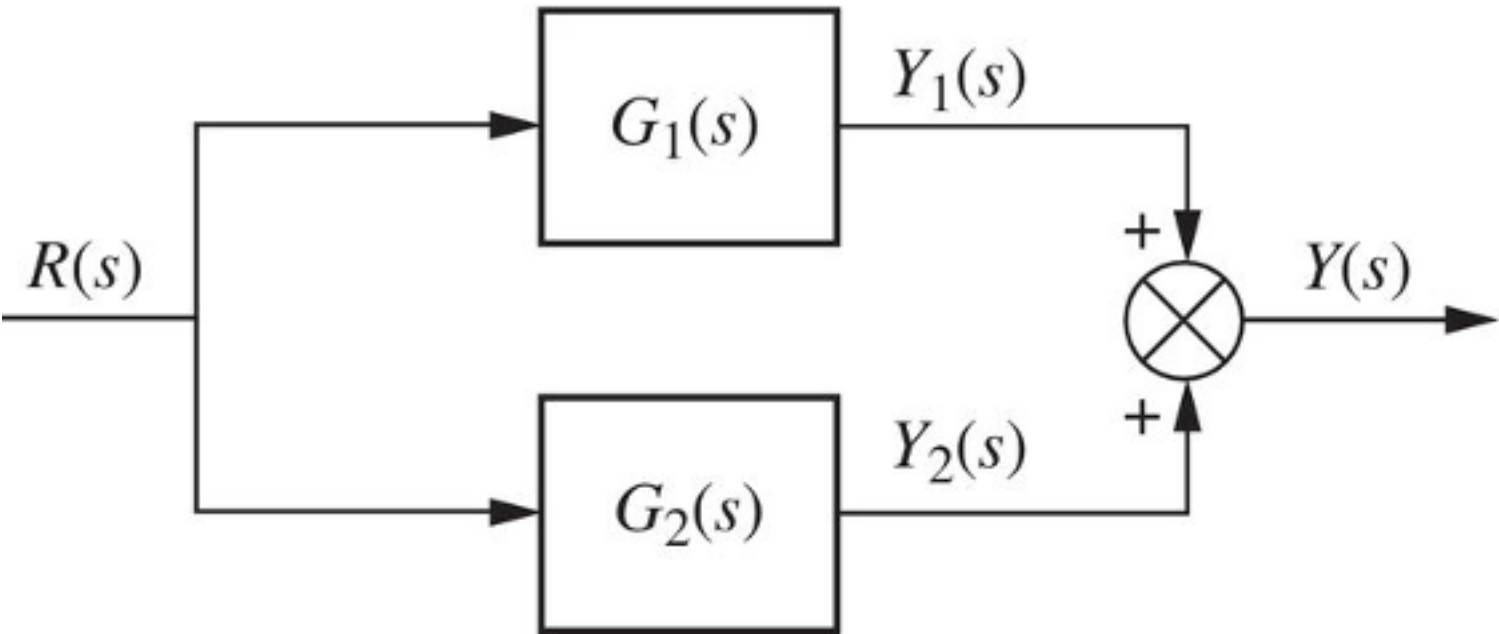


Selected Answer:
 $Y(s) = \frac{2s^2 + 6s + 5}{(s + 1)^2(s + 2)} R(s)$

Question 4

1 out of 1 points

Which of the following describes $\frac{Y(s)}{R(s)}$?



Selected Answer:
 $\frac{Y(s)}{R(s)} = G_1(s) + G_2(s)$